

WHAT IS CLAIMED IS:

1. A method for processing radio waves received at an on-glass antenna of a vehicle, comprising:

detecting wave strength of the radio wave at a running vehicle;

determining whether the wave strength is above a predetermined strength;

calculating change rate of the wave strength when the wave strength is above the predetermined strength; and

controlling amplification of the radio waves received by the on-glass antenna on the basis of the change rate of the wave strength.

2. The method of claim 1, wherein the predetermined strength is about 50dBuV.

3. The method of claim 1, wherein the controlling of amplification of the radio waves comprises:

determining whether the change rate of the wave strength is above a reference rate that is obtained as a function of the wave strength;

cutting off power supply of an on-glass antenna amplifier for amplifying signals of the on-glass antenna when the change rate of the wave strength is above the reference change rate; and

maintaining power supply of the on-glass antenna amplifier when the change rate of the wave strength is not above the reference change rate.

4. The method of claim 3, wherein the reference change rate is obtained as a first order function with respect to the wave strength

5. The method of claim 3, wherein the first order function produces 15 dB/sec at the predetermined strength of the wave strength and 20 dB/sec at the wave strength of 100dBuV.

6. An audio system of a vehicle comprising:

an on-glass antenna fixed to a window of a vehicle for receiving radio waves;

an on-glass antenna amplifier for amplifying the signals of the on-glass antenna;
a controller for detecting wave strength of the radio waves in a running state of
the vehicle and for controlling the on-glass antenna amplifier on the basis of the wave
strength; and

5 a tuner for detecting a signal from signals received from the on-glass antenna
amplifier,

wherein the controller executes instructions for:

detecting wave strength of the radio waves at a running vehicle;

determining whether the wave strength is above a predetermined strength;

10 calculating change rate of the wave strength when the wave strength is above
the predetermined strength; and

controlling amplification of the radio wave received by the on-glass antenna on
the basis of the change rate of the wave strength.

15 7. The audio system of claim 6, wherein the predetermined strength is about
50dBuV.

8. The audio system of claim 6, wherein the controlling of amplification of the
radio wave comprises:

20 determining whether the change rate of the wave strength is above a reference
rate that is obtained as a function of the wave strength;

cutting off power supply of an on-glass antenna amplifier for amplifying signals
of the on-glass antenna when the change rate of the wave strength is above the reference
change rate; and

25 maintaining power supply of the on-glass antenna amplifier when the change
rate of the wave strength is not above the reference change rate.

9. The method of claim 8, wherein the reference change rate is obtained as a
first order function with respect to the wave strength.

30 10. The method of claim 8, wherein the first order function produces 15 dB/sec

at the predetermined strength of the wave strength and 20 dB/sec at the wave strength of 100dBuV.